

Express Mail No.: EL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Chan et al.

Serial No.: 09/783,472

Filed: February 14, 2001

For:

METHODS AND APPARATUSES FOR

CHARACTERIZATION OF SINGLE

POLYMERS

Art Unit: 1743

Examiner: To be assigned

Attorney Docket No: 10066-021

TRANSMITTAL UNDER 37 C.F.R. § 1.27(c) OF VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

It is respectfully requested that the above-identified patent application be accorded Small Entity Status in view of the Verified Statement Claiming Small Entity Status which is submitted herewith. The Verified Statement has been executed by Eugene Chan, Chief Executive Officer of U.S. Genomics, Inc., on July 23, 2001 and declares that U.S. Genomics, Inc., the sole assignee of the above-identified application, qualifies as a small business concern under 37 C.F.R. § § 1.27(a) and (c). An assignment to U.S. Genomics, Inc., is being submitted for recordation on even date herewith.

Applicants respectfully request that this document be made of record in the file history of the above-identified application, and that the application be accorded Small Entity Status.

Respectfully submitted,

Date

October 24, 2001

1/1/2 sh

(Reg. No.)

PENNIE & EDMONDS LLP

1155 Avenue of the Americas New York, New York 10036-2711

(212) 790-9090

Enclosure





DECLARATION FOR NON-PROVISIONAL PATENT APPLICATION*

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below at 201 et seq. beneath my name.

I believe I am the original, first and sole inventor if only one name is listed at 201 below, or an original, first and joint inventor if plural names are listed at 201 et seq. below, of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHODS AND APPARATUSES FOR CHARACTERIZATION OF SINGLE POLYMERS

□ is attached hereto and includes amendment(s) filed on (if applicable)

was filed in the United States on February 14, 2001 as Application No. 09/783,472 (for declaration not accompanying application)

with amendment(s) filed on (if applicable)

□ was filed as PCT international Application No. on and was amended under PCT Article 19 on (gapplicable)

1 hereby state that 1 have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

l hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

FLJ	EARLIEST FOREIGN APPLIC	ATION(S), IF ANY, FILED PRIOR	TO THE FILING DATE (OF THE APPLICATION	
End End	APPLICATION NUMBER	COUNTRY	DATE OF FILING (day, month, year)	PRIORITY CLAIMED	
F1.0				YES D NO D	
222				YES - NO -	

1 hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below.

PROVISIONAL APPLICATION NUMBER	FILING DATE
60/149,020	August 13, 1999

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

EII DIC DATE		STATUS	
D. FILING DATE	PATENTED	PENDING	ABANDONED
August 11, 2000		X	
		, , , , , , , , , , , , , , , , , , ,	
	FILING DATE August 11, 2000	PATENTED	FILING DATE PATENTED PENDING

^{*} for use only when the application is assigned to a company, partnership or other organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

	T				
	FULL NAME	LAST NAME Chan	FIRST NAME	MIDDLE NAME	
2	OF INVENTOR		Eugene	Y.	
õ	RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENS	SHIP
1	CITIZENSHIP	Brookline	Massachusetts	United States	
	POST OFFICE	STREET	CITY	STATE OR COUNTRY	ZIP CODE
	ADDRESS	133 Park Street, Apt. 1001	Brookline	Massachusetts	02446
		SIGNATURE OF INVENTOR 201	3	DATE	
			and the same of th	7/23/01	
	PHIL MANGE	LAST NAME	FIRST NAME	MIDDLE NAME	
ri s	FULL NAME OF INVENTOR	Gleich	Lance	C.	
2		CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
0 2	RESIDENCE & CITIZENSHIP	Somerville	Massachusetts	United States	HIP
4		STREET	СПУ		
i,	POST OFFICE	90 College Avenue #2	Somerville	STATE OR COUNTRY Massachusetts	ZIP CODE
Į.	ADDRESS		Somervine		02144
		SIGNATURE OF INVENTOR 202		DATE	
e de la composition della comp					
nia .	FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
	OF INVENTOR	Wellman	Parris	S.	
	RESIDENCE &	СПУ	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP United States	
2	CITIZENSHIP	Hillsborough	New Jersey		
House H Rose	POST OFFICE	STREET	СТТУ	STATE OR COUNTRY	ZIP CODE
si.	ADDRESS	61-3A Taurus Drive	Hillsborough	New Jersey	08876
		SIGNATURE OF INVENTOR 203		DATE	
		1			
	PIH I MANGE	LAST NAME	FIRST NAME	MIDDLE NAME	
ı	FULL NAME OF INVENTOR			MIDDED NAME	
		CITY	STATE OR FOREIGN COUNTRY		
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L	ADDRESS				
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I		CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSH	ID.
	RESIDENCE & CITIZENSHIP			COONING OF CHIZENSH	ır
ŀ		STREET	CITY	OTATTO CT. CT.	
١	POST OFFICE		СПУ	STATE OR COUNTRY	ZIP CODE
L	ADDRESS	CICNATURE OF BUILDING	1		
		SIGNATURE OF INVENTOR 205		DATE	



DECLARATION FOR NON-PROVISIONAL PATENT APPLICATION'

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below at 201 et seq. beneath my name.

I believe I am the original, first and sole inventor if only one name is listed at 201 below, or an original, first and joint inventor if plural names are listed at 201 et seq. below, of the subject matter which is claimed and for which a patent is sought on the invention entitled

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☐ is attached hereto and includes amendment(s) filed on of applicables

was filed in the United States on February 14, 2001 as Application No. 09/783,472 (for declaration not accompanying application) with amendment(s) filed on (famplicable)

□ was filed as PCT international Application No. on and was amended under PCT Article 19 on infapplicable)

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment referred to above.

l acknowledge the duty to disclose information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is elaimed:

EARLIEST FOREIGN APPLICAT	ΓΙΟΝ(S), IF ANY, FILED PR	OR, TO THE FILING DATE	OF THE APPL	ICATION
APPLICATION NUMBER	COUNTRY	DATE OF FILING (day, month, year)		RIORITY LAIMED
			YES 🗆	NO 🗆
1			YES □	NO 🗆

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below.

PROVISIONAL APPLICATION NUMBER	FILING DATE
60/149,020	August 13, 1999
	4-2-4-1

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

NON-PROVISIONAL APPLICATION SERIAL NO.		STATUS			
AFFLICATION SERIAL NO.	FILING DATE	PATENTED	PENDING	ABANDONED	
09/636,793	August 11, 2000		x		
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^{*} for use only when the application is assigned to a company, partnership or other organization.



I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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0 RESIDENCE & CITY STATE OR FOREIGN COUNTRY COUNTRY OF CITIZENSHIP	
3 CITIZENSHIP Hillsborough New Jersey United States	
POST OFFICE STREET CITY STATE OR COUNTRY ZIPCO	DE
ADDRESS 61-3A Taurus Drive Hillsborough New Jersey 0887	6
SIGNATURE OF INVENTOR 203 DATE	
FULL NAME FIRST NAME MIDDLE NAME	
OF INVENTOR	
2 O RESIDENCE & CITY STATE OR FOREIGN COUNTRY COUNTRY OF CITIZENSHIP	
4 CITIZENSHIP	
STREET CITY	DE
POST OFFICE ADDRESS STATE OF COUNTRY PROPERTY OF THE PROPERTY	
SIGNATURE OF INVENTOR 204 DATE	
FULL NAME LAST NAME FIRST NAME MIDDLE NAME	
OF INVENTOR 2	
0 RESIDENCE & STATE OR FOREIGN COUNTRY OF CITIZENSHIP	
5 CITIZENSHIP	
POST OFFICE STREET CITY STATE OR COUNTRY ZIP COL)E
ADDRESS	
SIGNATURE OF INVENTOR 205 DATE	



DECLARATION FOR NON-PROVISIONAL PATENT APPLICATION

As a below named inventor, I hereby declare that:

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APPLICATION NUMBER	COUNTRY	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
			YES D NO D
			YES O NO O

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NON-PROVISIONAL			STATUS	
APPLICATION SERIAL NO.	L NO. FILING DATE	PATENTED	PENDING	ABANDONED
09/636,793	August 11, 2000		х	

[•] for use only when the application is assigned to a company, partnership or other organization.

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		T			
	FULL NAME OF INVENTOR	LAST NAME Chan	FIRST NAME Eugene	MIDDLE NAME Y.	
2	RESIDENCE & CITIZENSHIP	cmy Brookline	STATE OR FOREIGN COUNTRY COUNTRY OF CITIZENSHIP	COUNTRY OF CITIZENSHIP United States	
	POST OFFICE ADDRESS	STREET 133 Park Street, Apt. 1001	CITY Brookline	STATE OR COUNTRY Massachusetts	ZIP CODE 02446
	7,521,355	SIGNATURE OF INVENTOR 201		DATE	
	FULL NAME OF INVENTOR	LAST NAME Gleich	FIRST NAME Lance	MIDDLE NAME C.	
	RESIDENCE & CITIZENSHIP	CITY Somerville	STATE OR FOREIGN COUNTRY Massachusetts	COUNTRY OF CITIZENSI United States	HIP
	POST OFFICE ADDRESS	STREET 90 College Avenue #2	crry Somerville	STATE OR COUNTRY Massachusetts	ZIP CODE 02144
		SIGNATURE OF INVENTOR 202		OATE	
	FULL NAME OF INVENTOR	LAST NAME Wellman	Partis	MIDDLE NAME S.	
	RESIDENCE & CITIZENSHIP	ctry Hillsborough	STATE OR FOREIGN COUNTRY New Jersey	COUNTRY OF CITIZENSHIP United States	
	POST OFFICE ADDRESS	STREET 61-3A Taurus Drive	cmy Hillsborough	STATE OR COUNTRY New Jersey	ZIP CODE 08876
		SIGNATURE OF INVENTOR 203	lum	9-18-	2001
	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
	RESIDENCE & CITIZENSHIP	СПУ	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSH	IP.
	POST OFFICE ADDRESS	STREET	СПҮ	STATE OR COUNTRY	ZIP CODE
		SIGNATURE OF INVENTOR 204		DATE	
	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
	RESIDENCE & CITIZENSHIP	CMY .	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSH	IP.
	POST OFFICE ADDRESS	STREET	СПУ	STATE OR COUNTRY	ZIP CODE
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01-04-02

Express Mail No.: EL 477033006 45

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Chan et al.

Application No.: 09/783,472

Group Art Unit:1743

Filed: February 14, 2001

Examiner: To Be Assigned

For:

METHODS AND APPARATUSES FOR

CHARACTERIZATION OF SINGLE

POLYMERS

Attorney Docket No.: 10066-021

POWER OF ATTORNEY BY ASSIGNEE AND EXCLUSION OF INVENTOR(S) UNDER 37 C.F.R. §3.71

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

The undersigned assignee of the entire interest in the above-identified subject application hereby appoints: S. Leslie Misrock (Reg. No. 18872), Berj A. Terzian (Reg. No. 20060), David Weild, III (Reg. No. 21094), Jonathan A. Marshall (Reg. No. 24614), Barry D. Rein (Reg. No. 22411), Stanton T. Lawrence, III (Reg. No. 25736), Charles E. McKenney (Reg. No. 22795), Philip T. Shannon (Reg. No. 24278), Francis E. Morris (Reg. No. 24615), Charles E. Miller (Reg. No. 24576), Gidon D. Stern (Reg. No. 27469), John J. Lauter, Jr. (Reg. No. 27814), Brian M. Poissant (Reg. No. 28462), Brian D. Coggio (Reg. No. 27624), Rory J. Radding (Reg. No. 28749), Stephen J. Harbulak (Reg. No. 29166), Donald J. Goodell (Reg. No. 19766), James N. Palík (Reg. No. 25510), Thomas E. Friebel (Reg. No. 29258), Laura A. Coruzzi (Reg. No. 30742), Jennifer Gordon (Reg. No. 30753), Allan A. Fanucci (Reg. No. 30256), Geraldine F. Baldwin (Reg. No. 31232), Victor N. Balancia (Reg. No. 31231), Samuel B. Abrams (Reg. No. 30605), Steven I. Wallach (Reg. No. 35402), Marcia H. Sundeen (Reg. No. 30893), Paul J. Zegger (Reg. No. 33821), Edmond R. Bannon (Reg. No. 32110), Bruce J. Barker (Reg. No. 33291), Adriane M. Antler (Reg. No. 32605), Thomas G. Rowan (Reg. No. 34419), James G. Markey (Reg. No. 31636), Thomas D. Kohler (Reg. No. 32797), Scott D. Stimpson (Reg. No. 33607), Gary S. Williams (Reg. No. 31066), William S. Galliani (Reg. No. 33885), Ann L. Gisolfi (Reg. No. 31956), Todd A. Wagner (Reg. No. 35399), Scott B. Familant (Reg. No. 35514), Kelly D. Talcott (Reg. No. 39582), Francis D. Cerrito (Reg. No.38100), Anthony M. Insogna (Reg. No. 35203), Brian M. Rothery (Reg. No. 35340), Brian D. Siff (Reg. No. 35679), Alan Tenenbaum (Reg. No. 34939), Michael J. Lyons (Reg. No. 37,386),



Express Mail No.: EL 477033006US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Chan et al.

Serial No.: 09/783,472

Art Unit: 1743

Filed: February 14, 2001

Examiner: To be assigned

For: METHODS AND APPARATUSES FOR

CHARACTERIZATION OF SINGLE

POLYMERS

Attorney Docket No: 10066-021

ASSOCIATE POWER OF ATTORNEY

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

The undersigned attorney of record in the above-identified application hereby

appoints

David B. Bernstein (Reg. No. 32,112)

U.S. Genomics, Inc. 6H Gill Street

Woburn, Massachusetts 01081

(Telephone No.: (781) 937-5550 x219)

her associate attorney to prosecute the said application, to make alterations and amendments therein, and to transact all business in the Patent and Trademark Office in connection therewith.

All correspondence relating to this application should continue to be addressed to the principal attorney whose address is PENNIE & EDMONDS LLP, 1155 Avenue of the Americas, New York, New York 10036-2711.

Respectfully submitted,

Date

October 24, 2001

PENNIE & EDMONDS LLP 1155 Avenue of the Americas New York, New York 10036-2711

(212) 790-9090

enclosed.

was recorded on

Garland T. Stephens (Reg. No. 37,242) and William J. Sipio (Reg. No. 34,514), all of Pennie & Edmonds LLP, whose addresses are 1155 Avenue of the Americas, New York, New York 10036, 1667 K Street N.W., Washington, DC 20006 and 3300 Hillview Avenue, Palo Alto, CA 94304, all of Pennie & Edmonds LLP (PTO Customer No. 20583), as its attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventors and their attorney(s) in accordance with the provisions of 37 C.F.R. §3.71, provided that, if any one of these attorneys ceases being affiliated with the law firm of Pennie & Edmonds LLP as partner, counsel, or employee, then the appointment of that attorney and all powers derived therefrom shall terminate on the date such attorney ceases being so affiliated.

An assignment of the entire interest in the above-identified subject application:

Please direct all correspondence for this application to customer No. 20583.

at reel/frame /

is submitted on even date herewith for recording. A copy of the Assignment is

ASSIGNEE:	U.S. Genomics, Inc.
Signature:	Daid fle
Typed Name:	Bagone Y. Chan David B. Bernstein
Position/Title:	Chief Executive Officer General Counsel
Address:	6H Gill Street
	Woburn, Massachusetts 01801
Date:	September 24, 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re:

Application of: Chan et al.

□ Patent of:

Application No.: 09/783,472

□ Patent No.:

□ Filed: February 14, 2001

□ Issued:

For: METHODS AND APPARATUSES FOR CHARACTERIZATION OF SINGLE

POLYMERS

Group Art Unit: 1743

Examiner: To be assigned

Attorney Docket No.: 10066-021

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS [37 C.F.R. § 1.27(a)(2)] - Small Business Concern

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

I hereby declare that I am

□ the owner of the small business concern identified below:

 ■ an official of the small business concern empowered to act in behalf of the concern identified below:

Name of organization <u>U.S. Genomics, Inc.</u>

Address of organization 6H Gill Street

Woburn, Massachusetts 01801

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 37 C.F.R. § 1.27(a)(2), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the person employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern and/or there is an obligation under contract or law by the inventor(s) to convey rights to the small business concern with regard to the invention entitled METHODS AND APPARATUSES FOR CHARACTERIZATION OF SINGLE POLYMERS by inventor(s) Chan et al. described in

□ the specification filed herewith

application no. 09/783,472 filed February 14, 2001

□ patent no.

issued

(37 CFR 1.27)

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 C.F.R. § 1.27(a)(1) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 C.F.R. § 1.27(a)(2), or a nonprofit organization under 37 C.F.R. § 1.27(a)(3).

FULL NAME ADDRESS_
□ INDIVIDUAL □ SMALL BUSINESS CONCERN □ NONPROFIT ORGANIZATION
FULL NAMEADDRESS
□ INDIVIDUAL □ SMALL BUSINESS CONCERN □ NONPROFIT ORGANIZATION
FULL NAMEADDRESS
□ INDIVIDUAL □ SMALL BUSINESS CONCERN □ NONPROFIT ORGANIZATION
I acknowledge the duty to file, in this application or patent, notification of any change in statu resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entities no longer appropriate. [37 CFR 1.28 (b)] I hereby declare that all statements made herein of my own knowledge are true and that all state
ments made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, and patent issuint thereon, or any patent to which this verified statement is directed.
Send correspondence to: PENNIE & EDMONDS LLP 1155 Avenue of the Americas New York, N.Y. 10036-2711 Direct Telephone calls to: PENNIE & EDMONDS LLP (212) 790-9090
Name of person signing Eugene Y. Chan
Title of person other than owner Chief Executive Officer
Address of person signing U.S. Genomics, Inc.
6H Gill Street
Woburn, Massachusetts 01801
Signature Date
*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities.

ASSIGNMENT

WHEREAS, WE, Eugene Y. Chan, Lance C. Gleich, and Parris S. Wellman, ASSIGNORS, citizens of the United States, residing at 133 Park Street, Apt. 1001, Brookline, Massachusetts 02446; 90 College Avenue #2, Somerville, Massachusetts 02144; and 61-3A Taurus Drive, Hillsborough, New Jersey 08876, respectively, are the inventors of the invention in for METHODS AND APPARATUSES FOR CHARACTERIZATION OF SINGLE POLYMERS which we have executed an application for a Patent of the United States
□ which is executed on □ even date herewith or □
which is identified by Pennie & Edmonds LLP docket no. 10066-021 which was filed on February 14, 2001, Application No. 09/783,472
and WHEREAS, U.S. Genomics, Inc., a Massachusetts corporation having a principal place of business at 8 St. Mary's Street, Suite 922, 9th Floor, Boston, Massachusetts 02215, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:
NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international greement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Cofficial of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument. AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have
AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.
Date July 23 , 2001 Eugené Y. Chan
Date
Date, 2001L.S
State of Massachusetts) SS.: County of Middleser)
In the State of Massachuse 1/2, county of Middlese way, on July 23 2001, before me, David B. Bevastein. Notary Public, personally Appeared Eugene Y. Chan personally known to me on the basis of satisfactory evidence to be the person of that name, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument, and he acknowledged the same to be his free act and deed.

WITNESS my hand and official seal

David B. Bernstein, Notary Public
Norfolk County
Commonwealth of Massachusetts
My Commission Expires Apr. 4, 2008

Notary Public

State of) SS.:	
County of) 33	
and that by his signature of	, county of, county of, Notary Public, personally Appeared	on, before e.C. Gleich personally known to me on the basis of that he executed the same in his authorized capacity, lf of which the person acted, executed the instrument,
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		Notary Public
		15
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County of	SS.:	
and that by his signature or and he acknowledged the s	the person of that name, and acknowledged to me	, on, before S. Wellman personally known to me on the basis of that he executed the same in his authorized capacity, if of which the person acted, executed the instrument,
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ASSIGNMENT

WHEREAS, WE, Eugene Y, Chan, Lance C, Gleich, and Parris S, Wellman, ASSIGNORS, citizens of the United States residing at 133 Park Street, Apt. 1001, Brookline, Massachusetts 02446; 90 College Avenue #2, Somerville, Massachusetts 02144 and 61-3A Taurus Drive, Hillsborough, New Jersey 08876, respectively, are the inventors of the invention in for METHODS AND APPARATUSES FOR CHARACTERIZATION OF SINGLE POLYMERS which we have executed an application for a Patent of the United States

	which is executed on	even date herewith or	J	
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which is identified by Pennie & Edmonds (1) docket no. 10066-021 which was filed on February 14, 2001, Application No. 09 783,472

and WHEREAS, U.S. Genomics, Inc., a Massachusetts corporation having a principal place of business at 8 St. Mary's Street, Suite 922. 9th Floor, Boston, Massachusetts 02215, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, signall lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date	2001	Eugene Y. Chan		L.S.
Date 31 July	, 2001	Lance C. Gleich	-	L.S.
Date	, 2001	Parris S. Wellman	•	L.S
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		Notary Public	Devin Gray
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WITNESS my	y hand and official seal		
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APPARATUSES FOR CHARACTERIZATION OF SINGLE POLYMERS which we have executed an application for a Patent of the
United States

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which is identified by Pennie & Edmonds (12 docket no. 10066-021 which was filed on February 14, 2001, Application No. 09 783,472

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AND WE HERIBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WIIEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date	, 2001		L.S
		Eugene Y. Chan	
Date	, 2001	Lance C. Gleich	L.S
Date feptember	<i>18</i> _, 2001	Herry Chellower Farris S. Wellman	1.S
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satisfactory evidence to t	oe the person of th on the instrument:	at name, and acknowledged to me the the person, or the entity upon behalf	on, on, before <u>Y. Chan</u> personally known to me on the basis of that he executed the same in his authorized capacity of which the person acted, executed the instrumen
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			YVONNE R. JO	HNSON

NOTARY PUBLIC OF NEW JERSEY My Commission Expires May 24, 2005